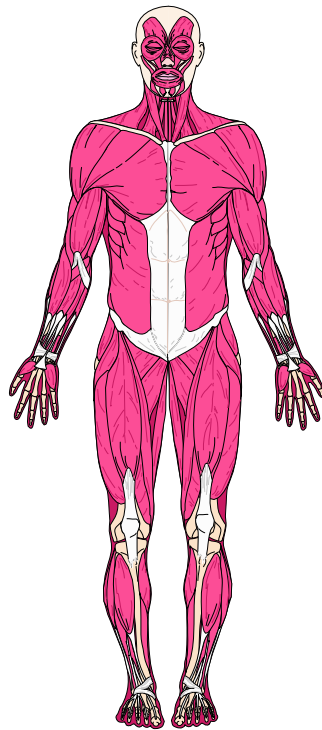


# Pressure Ulcers

## *Clinical Proficiency Module*



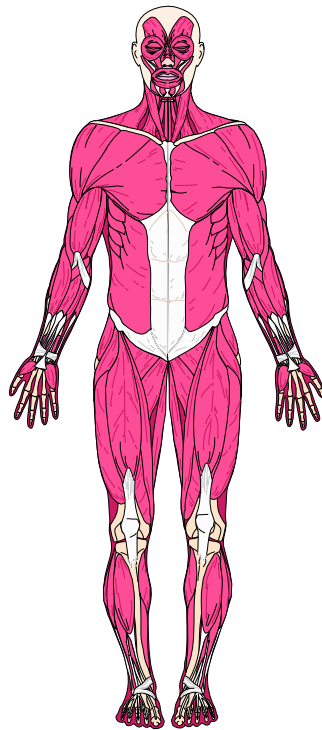
By

Barbara Branon-Bissette, BSN MBA EDS  
Piedmont Region Education Consultant  
Center for Aide Regulation and Education  
North Carolina Department of Health & Human Services  
Division of Health Service Regulation

2000

# Pressure Ulcers

## *Clinical Proficiency Module*



## Introduction

## Clinical Proficiency Module Pressure Ulcers Syllabus

### Description:

*Pressure Ulcers* is a clinical curriculum module designed to give the nurse aide or personal care aide additional learning opportunities. With this module, the aide will enjoy a lecture-discussion atmosphere delivered in a short time-span, thirty to forty minutes in most cases, with learning activity assignments that can be accomplished during the workday in the clinical setting.

The goal of this clinical curriculum module is to enrich the knowledge base of the nursing assistant and personal care aide, providing an educational opportunity leading to improved personal and professional performance

### Objectives:

1. Identify the *pressure ulcer* process, defining selected key terms.
2. Label the three most common sites for *pressure ulcers*.
3. Label five additional sites for *pressure ulcers*.
4. Describe four *pressure ulcer* sites of concern for the obese patient/resident.
5. Name ten health problems that cause an increased risk for *pressure ulcer* development.
6. Write four clinical signs that will alert you to the beginning of a *pressure ulcer*.
7. Define and arrange in the order of occurrence the four stages of tissue breakdown involved in *pressure ulcer* development.
8. Outline methods the aide may use to help prevent *pressure ulcers*.
9. Identify and explain equipment and techniques the aide might use to help prevent *pressure ulcers*.

### **Teaching Methods:**

- Lecture
- Group Discussion
- Overhead Transparencies
- Activity Worksheets
- Clinical Practice Sheets
- Additional Information Handouts

### **Method of Evaluation for Proficiency:**

In order to meet requirements for the clinical proficiency module, the nurse aide must:

- Attend all class presentations for the complete time period.
- Satisfactorily complete all Activity Worksheets
- Satisfactorily complete all Clinical Practice Sheet assignments.

## **Directions for Use of the Pressure Ulcers Curriculum Module**

The Pressure Ulcers curriculum module has been prepared for two groups of people. First, the instructors for whom we wish to provide a curriculum that can be used to complement their teaching skills and help them to educate nurse aides to remain knowledgeable, efficient, and caring. Second, the aides, for whom we wish to provide the knowledge and skills necessary to remain competent and current in their provision of care.

### **Handouts**

No text is identified. Additional Information Handouts may be made from current medical-surgical texts available in most facilities as well as medical dictionaries. Often, current allied health journals will have articles that are well suited for text materials and include very detailed color pictures. By using the computerized catalog in a nearby college library, many up-to-date materials may be found quickly.

Very current text materials may be printed directly from the Internet. By searching for "Pressure Sores" or "Pressure Ulcers" using any search engine available, a wide range of materials may be printed for background study or to enrich the provided content through handouts. Students who have the availability of the Internet at home may be challenged to bring information to the class for discussion.

### **Overhead Transparencies**

Overhead transparencies for the curriculum module are included. Each overhead corresponds to a specific objective and includes information gleaned from individual curriculum pages. Each overhead corresponds to the objective number at the bottom of the master. Even though use of overhead transparencies by the instructor is optional, their use may be an effective teaching tool for aides who are visual learners.

## **Activity Worksheets**

Each Clinical Proficiency Module Written Activity Worksheet is designed to enhance understanding of the content included in the module. Each Activity Worksheet requires completion, using the content presented to the aide during the lecture sequence. Each Activity Worksheet corresponds with a specific objective or objectives and is coded with the corresponding objective number(s) at the bottom of the Activity Worksheet master. An Instructor Answer Key is included when applicable. The master copy of each Activity Worksheet should be duplicated and distributed to each aide at the appropriate time during the lecture sequence. Completion of the Activity Worksheets is a requirement for successful completion of the Pressure Ulcers Curriculum Module.

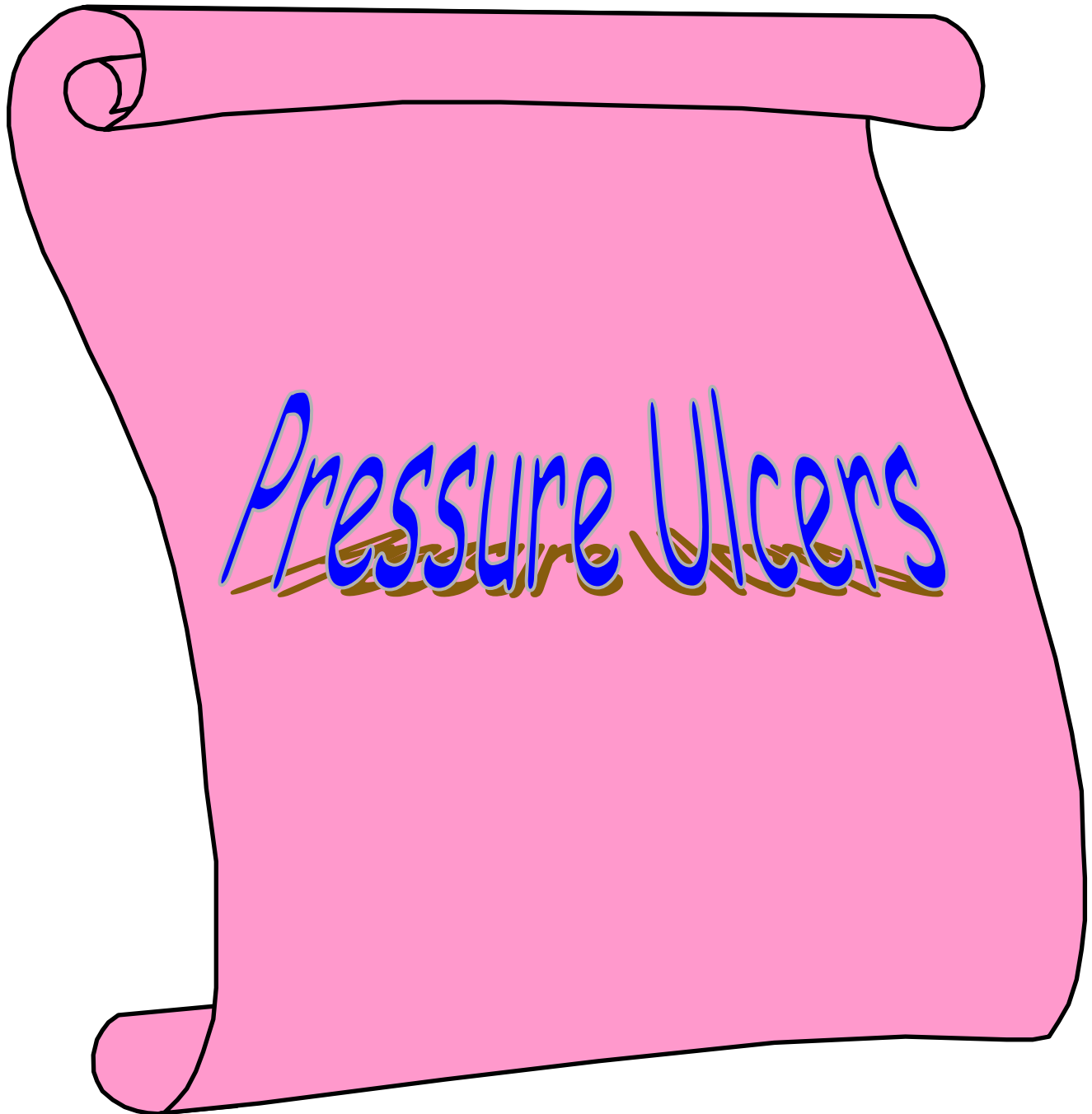
## **Clinical Practice Sheets**

Clinical Practice Sheets are designed to be used during the course of the aide's workday. Completion of each Clinical Practice Sheet requires the application of content presented in the lecture sequence. Each Clinical Practice Sheet corresponds with a specific objective or objectives and is coded with the corresponding objective number(s) at the bottom of the sheet. A master copy of each Clinical Practice Sheet and an Instructor Answer Key (when applicable) are included. The master copy of each Clinical Practice Sheet should be duplicated and distributed to each aide at the end of the appropriate lecture sequence segment. A correctly completed Clinical Practice Sheet overhead is included for use during Group Discussion (see below) on the following Course Day. Completion of the Clinical Practice Sheets is required for successful completion of the curriculum module.

## **Group Discussion**

Each objective allows time for Group Discussion. Group Discussion is done after each aide has completed the written Activity Worksheets corresponding to the current lecture segment or after completion of Clinical Practice Sheet from previous lecture segments. It is, therefore, based on the answers to the Activity Worksheets or Clinical Practice Sheets and information gleaned from the lecture

sequence. Group Discussion is facilitated by the instructor and allows the aide to voluntarily answer the questions on the written Activity Worksheets or Clinical Practice Sheets from a previous lecture segment. Presentation of information that has been learned to a group of peers increases the self-esteem of many students and should be considered an important component of this Curriculum Module.



Overhead 1 - Title

# Pressure Ulcers

## Objectives

- Identify the **pressure ulcer** process, defining selected key terms.
- Label common sites for **pressure ulcers**.
- Describe four **pressure ulcer** sites of concern for the obese patient/resident.
- Name ten health problems that cause an increased risk for **pressure ulcer** development.
- Write four clinical signs that will alert you to the beginning of a **pressure ulcer**.
- Define and arrange, in the order of occurrence, the four stages of tissue breakdown involved in **pressure ulcer** development.
- Outline methods the aide may use to help prevent **pressure ulcers**.
- Identify and explain the use of equipment designed to help prevent **pressure ulcers**.



# Pressure Ulcers

## Method of Evaluation



- ✓ Attend all class presentations
- ✓ Complete all activity worksheets
- ✓ Complete all clinical practice sheet assignments.

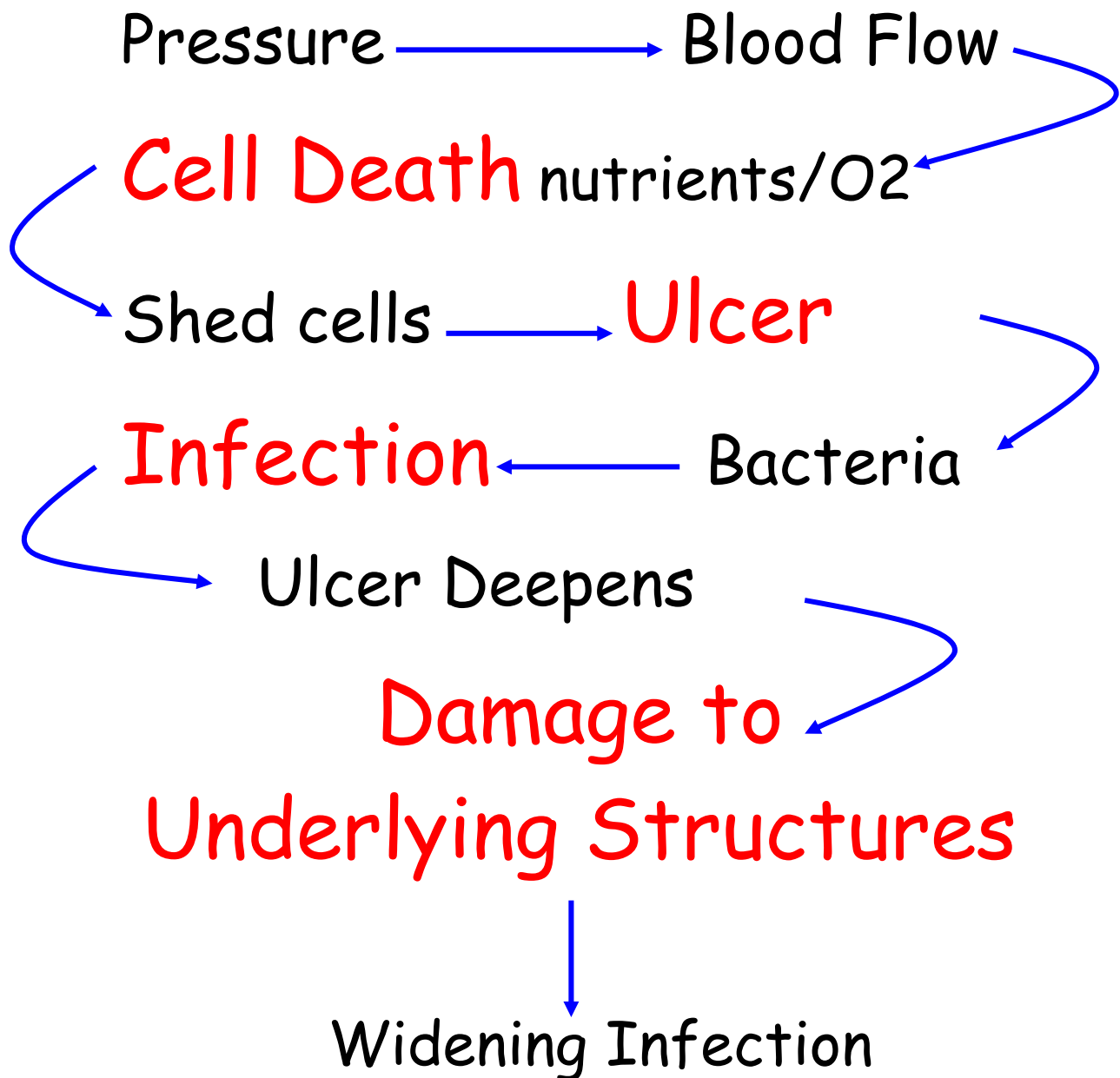
**Clinical Proficiency Module**  
**Pressure Ulcers**  
 Suggested Approach on Course Day 1

**Approximate Time To Cover Content:** 30 minutes

Objective 1: Identify the pressure ulcer process, defining selected key terms.	
<u>Content</u>	<u>Notes</u>
<p><b><u>Key Terms and Definitions:</u></b></p> <p><u>Cells</u>-Basic building blocks of the body. The "bricks" that make up the wall that we call a body.</p> <p><u>Tissue</u>-A group of cells that work together. Skin, muscle, and nerves are examples.</p> <p><u>Bony Prominences</u>-Bony areas of the body that have a thin covering of skin and little protective fat.</p> <p><u>Ulcer</u>-A defect or hole in tissue caused by shedding of inflamed, dead cells.</p> <p><u>Nutrient</u>-Substances in food that are necessary for cell growth and repair.</p> <p><u>Oxygen</u>-A colorless, odorless gas necessary for life.</p> <p><u>Pressure Ulcer</u>-A local ulcer of skin tissue or deeper structures that occurs when nutrient and oxygen flow are impaired to an area due to prolonged pressure. May also be called pressure sores, decubitus ulcers and bedsores.</p> <p><u>Bacteria</u>-Can cause disease by producing substances that inflame body areas.</p>	

Objective 1: Identify the pressure ulcer process, defining selected key terms.	
<u>Content (cont'd)</u>	<u>Notes</u>
<p><i>(Instructor: Please use Overhead 4.)</i></p> <p>A pressure ulcer occurs when skin tissue breaks down due to lack of blood flow that carries nutrients and oxygen to the skin cells.</p> <p>All body cells need the constant supply of nutrients and oxygen that blood flow brings.</p> <p>Skin tissue covering bony prominence with little protective fat can experience a decrease in blood flow, and therefore nutrients and oxygen, when trapped between a bony prominence and a poorly chosen support surface.</p> <p>Bacteria can invade the area and infections will develop.</p>	

# Pressure Ulcer Snake



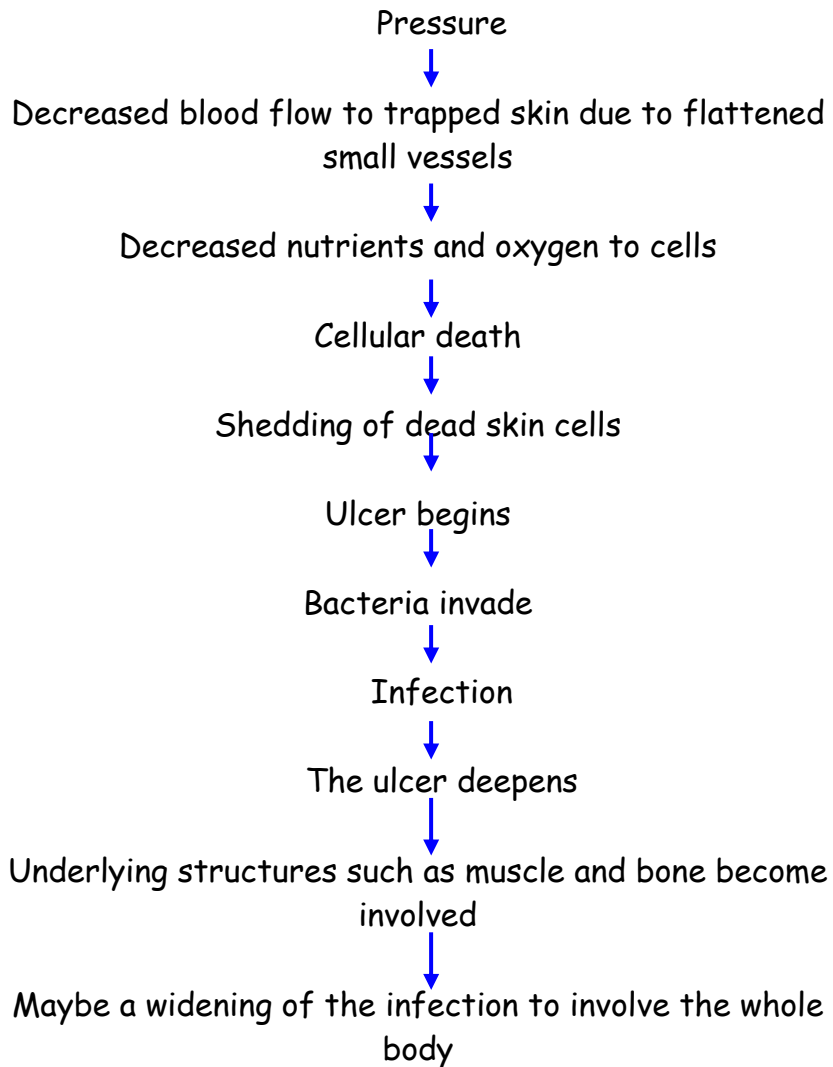
**The process can no longer be reversed!!**

**Objective 1: Identify the pressure ulcer process, defining selected key terms.**

Content (cont'd)

Notes

**The pressure ulcer formation process is:**



**The process can no longer be reversed.**

*(Instructor: Please use Activity Worksheet 1 and Overhead 5)*

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Activity Worksheet**

Before our next class, please complete this crossword puzzle. Get your classmates and friends to help you, if you like!

								7			
					5						
1											
										8	
	2					6					
						3					
					4						

Across:

1. A group of cells that work together
2. Colorless and odorless gas necessary for life.
3. A defect or hole in tissue caused by shedding of dead cells
4. Building blocks of the body

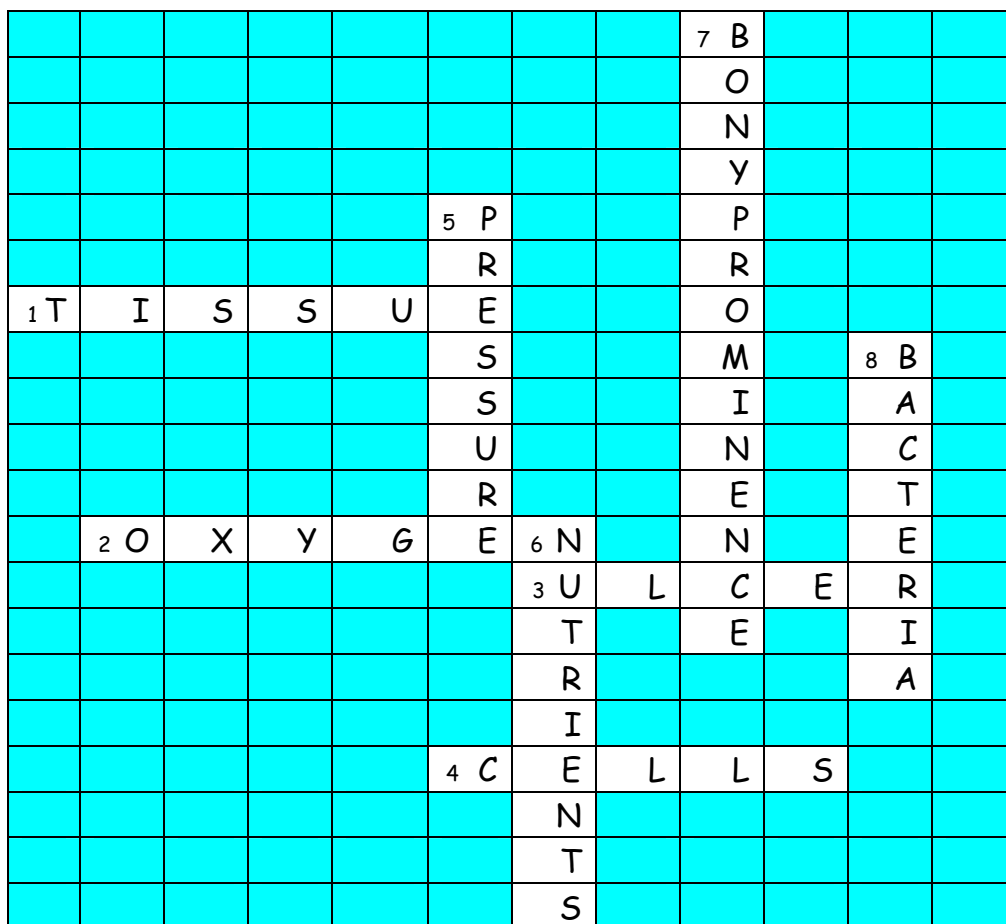
Down:

5. One cause of pressure ulcers
6. Substances in food necessary for cell growth.
7. Areas of the body that are thinly covered with skin
8. These can cause disease

Before our next class, please write on back of sheet the pressure ulcer process in the order in which it occurs. You may use your own words to describe each step. HINT: There are 11 steps between the beginning and when the process can no longer be reversed. Classmates may wish to work together on this.

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Activity Worksheet**

Before our next class, please complete this crossword puzzle. Get your classmates and friends to help you, if you like!



Across:

9. A group of cells that work together
10. Colorless and odorless gas necessary for life.
11. A defect or hole in tissue caused by shedding of dead cells
12. Building blocks of the body

Down:

13. One cause of pressure ulcers
14. Substances in food necessary for cell growth.
15. Areas of the body that are thinly covered with skin
16. These can cause disease

Before our next class, please write on back of sheet the pressure ulcer process in the order in which it occurs. You may use your own words to describe each step. HINT: There are 11 steps between the beginning and when the process can no longer be reversed. Classmates may wish to work together on this.

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Suggested Approach on Course Day 2**

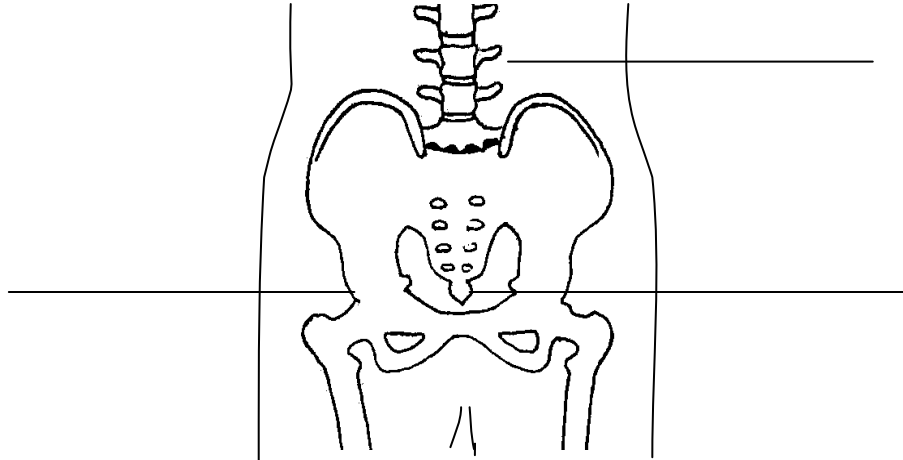
**Approximate Time To Cover Content:** 30 minutes for objectives 2, 3, and 4.

Objective 2: Label the three most common sites for <i>pressure ulcers</i> .	
<u>Content</u>	<u>Notes:</u>
<p>(Instructor, please use Activity Worksheet 2 and Transparency 6)</p> <p>The three most common sites for <i>pressure ulcers</i> are:</p> <ol style="list-style-type: none"> <li>1. Spine</li> <li>2. Tail bones on either side of lower spine</li> <li>3. Hip Joint Bones</li> </ol> <p>Why would these areas be the most common sites for <i>pressure ulcers</i>?</p> <p>Because you lie on them and these sites are thinly covered by skin.</p>	
Objective 3: Label five additional sites for <i>pressure ulcers</i>	
<u>Content</u>	<u>Notes</u>
<p>Five additional sites for <i>pressure ulcers</i> are:</p> <ol style="list-style-type: none"> <li>1. Heels and Ankles</li> <li>2. Shoulders</li> <li>3. Knees</li> <li>4. Ears and Head</li> <li>5. Elbows</li> </ol> <p>What is there about these sites that make them the next most common sites for <i>pressure ulcers</i>?</p> <p>Because these are more moveable and active joints, but still thinly covered and considered pressure sites.</p>	

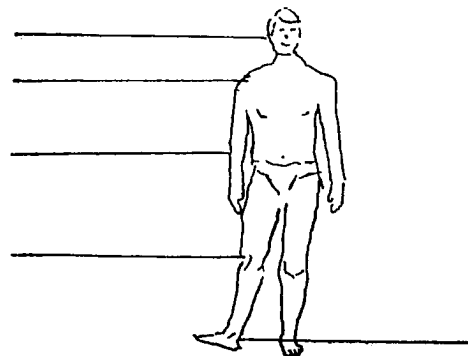
Objective 4: Label four <i>pressure ulcer</i> sites of concern for the obese patient/resident	
<u>Content</u>	<u>Notes</u>
<p>Obese patients/residents can develop <i>pressure ulcers</i> in areas where body parts rub together. The four pressure-ulcer sites of concern for the obese patient/resident are:</p> <ol style="list-style-type: none"> <li>1. Under breasts</li> <li>2. Folds of the abdomen</li> <li>3. Between the buttocks</li> <li>4. Thighs</li> </ol> <p>In the obese patient/resident, why are these areas a problem for <i>pressure ulcer</i> formation?            Because of obesity, these areas either rub together or have extra folds, promoting moisture and extra pressure.</p> <p><i>(Instructor: Please distribute Clinical Practice Sheet 1)</i></p>	

Clinical Proficiency Module  
Pressure Ulcers  
Activity Worksheet

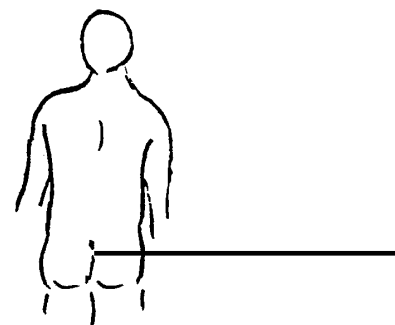
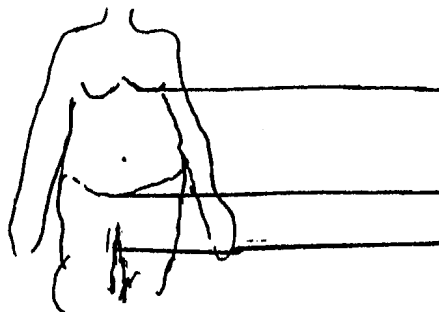
Please label below the three most common sites for *pressure ulcers*.



Please label the figure to the right with the five additional sites for *pressure ulcers*.

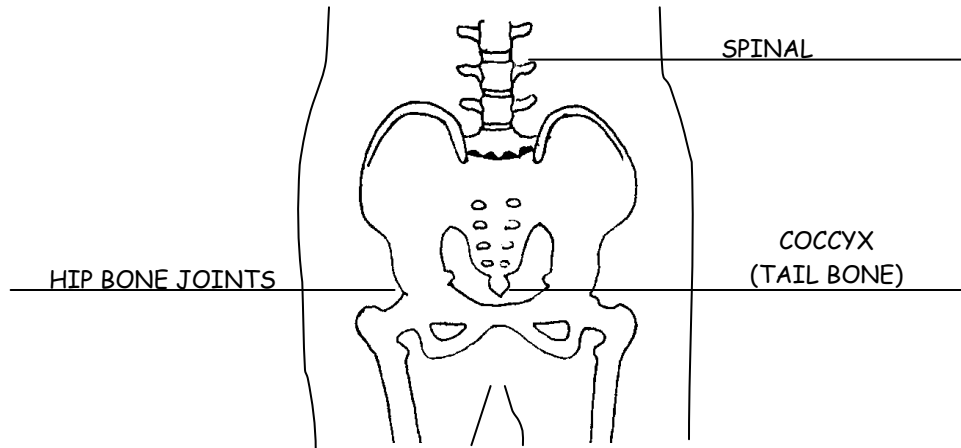


Please label the figures below with the four *pressure ulcer* sites of concern for obese patients or residents.

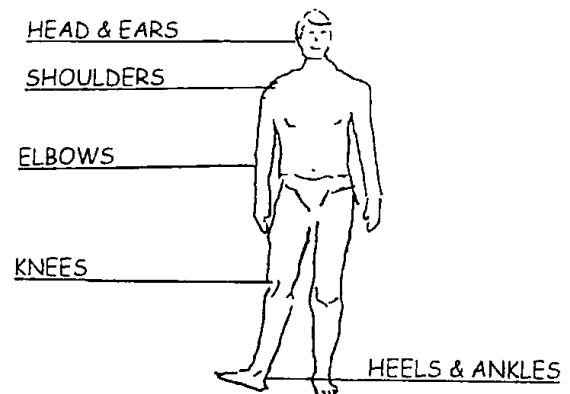


**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Activity Worksheet Answer Key**

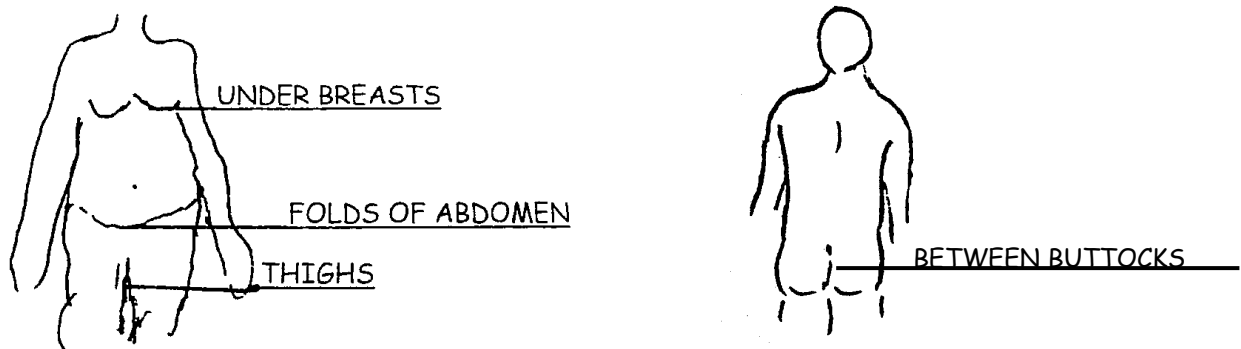
Please label below the three most common sites for *pressure ulcers*.



Please label the figure to the right with the five additional sites for *pressure ulcers*.



Please label the figures below with the four *pressure ulcer* sites of concern for obese patients or residents.



**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Clinical Practice Sheet**

Student Name \_\_\_\_\_ Instructor Name \_\_\_\_\_

Date \_\_\_\_\_

Student Grade \_\_\_\_\_ Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Comments \_\_\_\_\_

**Objective 2-Identify six patients/residents who are found positioned on one of each of three most common pressure ulcer sites. Please use patient initials only!**

1. Initials \_\_\_\_\_ Site \_\_\_\_\_
2. Initials \_\_\_\_\_ Site \_\_\_\_\_
3. Initials \_\_\_\_\_ Site \_\_\_\_\_
4. Initials \_\_\_\_\_ Site \_\_\_\_\_
5. Initials \_\_\_\_\_ Site \_\_\_\_\_
6. Initials \_\_\_\_\_ Site \_\_\_\_\_

**Objective 3-Identify five patients/residents who are found positioned on one of each of the five additional pressure ulcer sites. Please use patient initials only!**

1. Initials \_\_\_\_\_ Site \_\_\_\_\_
2. Initials \_\_\_\_\_ Site \_\_\_\_\_
3. Initials \_\_\_\_\_ Site \_\_\_\_\_
4. Initials \_\_\_\_\_ Site \_\_\_\_\_
5. Initials \_\_\_\_\_ Site \_\_\_\_\_

**Objective 4-Identify four obese patients/residents who are found positioned on one of the pressure ulcer sites of concern to the obese patient/resident. Please use initials only!**

1. Initials \_\_\_\_\_ Site \_\_\_\_\_
2. Initials \_\_\_\_\_ Site \_\_\_\_\_
3. Initials \_\_\_\_\_ Site \_\_\_\_\_
4. Initials \_\_\_\_\_ Site \_\_\_\_\_

**Comments/Questions/Concerns:** Please write it down. We'll talk about it in our next class.

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Suggested Approach on Course Day 3**

**Approximate Time To Review Clinical Practice Sheet:** 15 minutes

*(Instructor: Please use Overhead 7 to review Clinical Practice Sheet 1)*

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Clinical Practice Sheet**

Student Name \_\_\_\_\_ Instructor Name \_\_\_\_\_

Date \_\_\_\_\_

Student Grade \_\_\_\_\_ Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Comments \_\_\_\_\_

**Objective 2-Identify six patients/residents who are found positioned on one of each of three most common pressure ulcer sites. Please use patient initials only!**

7. Initials _____	Site _____
8. Initials _____	Site _____
9. Initials _____	Site _____
10. Initials _____	Site _____
11. Initials _____	Site _____
12. Initials _____	Site _____

**Objective 3-Identify five patients/residents who are found positioned on one of each of the five additional pressure ulcer sites. Please use patient initials only!**

6. Initials _____	Site _____
7. Initials _____	Site _____
8. Initials _____	Site _____
9. Initials _____	Site _____
10. Initials _____	Site _____

**Objective 4-Identify four obese patients/residents who are found positioned on one of the pressure ulcer sites of concern to the obese patient/resident. Please use initials only!**

5. Initials _____	Site _____
6. Initials _____	Site _____
7. Initials _____	Site _____
8. Initials _____	Site _____

**Comments/Questions/Concerns:** Please write it down. We'll talk about it in our next class.

**Approximate Time To Cover Content:** 30 minutes

Objective 5: Name ten health problems that cause an increased risk for pressure ulcer development.

<u>Content</u>	<u>Notes</u>
<p><b><u>Key Terms and Definitions:</u></b></p> <p><u>Confinement</u>-Must stay within a specific area such as a bed, chair or wheelchair.</p> <p><u>Paralyzed</u>-Unable to move a body part such as legs, arms or one side of the face; immobile or immobility.</p> <p><u>Mental Awareness</u>-A measure of a persons ability to understand and react to activities that are going on around them.</p> <p><u>Balanced Diet</u>-Daily food intake that includes the correct number of servings of each type of food currently shown on the food pyramid.</p>	

Objective 5: Name ten health problems that cause an increased risk for pressure ulcer development.

Content (cont'd)

Notes

There are situations, or ways of being, in a person's life that can put them at risk for *pressure ulcers*.

A person may not be able to control or change these situations, or ways of being, because of some health problem that exists.

There are five main situations, or ways of being, that cause an increased risk for *pressure ulcers* :

1. Confined to a bed, chair or wheelchair
2. Immobility, can't move yourself around
3. Poor or no bowel or bladder control
4. Poor diet
5. Lowered mental awareness

What are the names of some health problems that could cause a person to be in one of these situations or ways of being?

Let's take them in order and name two for each one of these situations.

Confined to a bed, chair, or wheelchair:

Paralyzed legs from a car accident  
Short of breath when active, Lung problems

Immobility, can't move yourself around:

Stroke  
Hip Fracture

Poor or no bowel or bladder control:

Stroke  
Alzheimer's

Objective 5: Name ten health problems that cause an increased risk for pressure ulcer development.

Content (cont'd)

Notes

Poor diet:

Depressed  
Stomach problems

Lowered Mental Awareness:

Stroke  
Mentally retarded

*(Instructor: Please allow time for class to complete Activity Worksheet 3. Exercise may be done in small groups.)*

*(After class completes Activity Worksheet 3, please use transparencies 8 and 9 to review responses. These may be projected onto a chalkboard or dry erase board. The answers from the class as to the five situations and the ten health problems that might cause each of the five situations may then easily be written on that board under the correct heading. The health problems listed under Lecture Content are but a few examples. Students may be encouraged to name more than two for each situation since space for more than two for each category has been allowed. Several could then be listed for each of the five categories.)*

**Clinical Proficiency Module**  
**Pressure Ulcers**  
**Activity Worksheet**

**Five situations or ways of being, in a person's life that can put them at risk for *pressure ulcers*:**

- 1.
- 2.
- 3.
- 4.
- 5.

**Ten health problems that could cause a person to be in one of these five situations:**

- |     |  |
|-----|--|
| 1.  | Confined to a bed, chair, or wheelchair. |
| 2.  |  |
| 3.  | Immobility, can't move yourself around.  |
| 4.  |  |
| 5.  | Poor or no bowel or bladder control.     |
| 6.  |  |
| 7.  | Poor diet.                               |
| 8.  |  |
| 9.  | Lowered mental awareness                 |
| 10. |  |

Clinical Proficiency Module  
Pressure Ulcers  
Activity Worksheet

Five situations, or ways of being, in a person's life that can put them at risk for *pressure ulcers*:

1.

2.

3.

4.

5.

## Ten health problems that could cause a person to be in one of these five situations:

Confined to a bed, chair, or wheelchair.

1.

2.

Immobility, can't move yourself around.

3.

4.

Poor or no bowel or bladder control.

5.

6.

Poor diet.

7.

8.

Lowered mental awareness

9.

10.

Objective 5: Name ten health problems that cause an increased risk for pressure ulcer development.

Content (cont'd)

Notes

*(Instructor: Please distribute Clinical Practice Sheet 2)*

Clinical Proficiency Module  
Pressure Ulcers  
Clinical Practice Sheet

Before we meet again, please find ten different patients or residents who have ten different health problems that place them in each of the five pressure-ulcer risk categories. Please ask your RN Supervisor if you are unsure of the exact health problem of a particular patient or resident you see in a risk situation. Be sure to use initials only!

1. Confined to a bed, chair or wheelchair

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

2. Immobility, can't move yourself around

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

3. Poor or no bowel or bladder control

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

4. Poor diet

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

5. Lowered mental awareness

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Initials \_\_\_\_\_ Health Problem \_\_\_\_\_

Clinical Proficiency Module

**Pressure Ulcers**

Suggested approach on Course Day 4

**Approximate Time to Review Clinical Practice Sheet:** 15 minutes

*(Instructor, please review Clinical Practice Sheet 2 and use Overhead 10 or draw on a chalkboard or dry-erase board. Ask the students to tell you the different health problems they found and listed on their Clinical Practice Sheets.)*

Clinical Proficiency Module

**Pressure Ulcers**

Clinical Practice Sheet

1. Confined to a bed, chair or wheelchair-Health Problems
2. Immobility, can't move yourself around-Health Problems
3. Poor or no bowel or bladder control-Health Problems
4. Poor diet-Health Problems
5. Lowered mental awareness-Health Problems

## 1. Confined to a bed, chair or wheelchair-Health Problems

- Paralyzed legs from a car accident
- Short of breath

## 2. Immobility, can't move yourself around-Health Problems

- Stroke
- Hip fracture

## 3. Poor or no bowel or bladder control-Health Problems

- Stroke
- Alzheimer's

## 4. Poor diet-Health Problems

- Depressed
- Stomach problems

## 5. Lowered mental awareness-Health problems

- Stroke
- Mentally retarded

**Approximate Time to Cover Objectives 6 and 7 Content:** 30 minutes

Objective 6: Write four clinical signs that will alert you to the beginning of a <i>pressure ulcer</i> .	
<u>Content</u>	<u>Notes</u>
<p><b><u>Key Terms and Definitions</u></b></p> <p><u>Cyanosis</u>-Dusky Blue-gray color of skin.</p> <p><u>Blanch/Blanching</u>-Becoming pale as pale skin or fingernails.</p> <p><u>Lecture Content</u></p> <p>There are findings on a person's body that should raise a "red flag" that a <i>pressure ulcer</i> might be beginning.</p> <p>We have talked about those patients/residents who might be positioned at risk for <i>pressure ulcers</i>.</p> <p>We have also talked about health problems that might cause a person to be in one of the five main situations that would increase a person's risk for <i>pressure ulcers</i>.</p> <p>When doing their daily work, the aide is in a very good position to be the member of the health care team who might see that a <i>pressure ulcer</i> is beginning.</p>	

Objective 6: Write four clinical signs that will alert you to the beginning of a *pressure ulcer*.

Content (cont'd)

Notes

There are four beginning signs of a *pressure ulcer* that may be seen in the clinical area in the course of a workday. These clinical signs are:

*(Instructor: Please use Overhead 12)*

1. Redness-Shows that there is pressure on that portion of skin. If pressed, the skin area will still blanch, turn pale.
2. Cyanosis-Dusky, blue-gray area-Shows that the blood vessels have had so much pressure they have closed off and skin cells are dying.
3. Blistering-The dead skin cells are beginning to slough.
4. Skin Breakdown-If the pressure is not relieved, this breakdown can go ever deeper into underlying tissue.

## Four Clinical Signs of Beginning Pressure Ulcer

1. **Redness**-Shows that there is pressure on that portion of skin. If pressed, the skin area will still blanch, turn pale.
2. **Cyanosis**-Dusky, blue-gray area-Shows that the blood vessels have had so much pressure they have closed off and skin cells are dying.
3. **Blistering**-The dead skin cells are beginning to slough.
4. **Skin Breakdown**-If the pressure is not relieved, this breakdown can go ever deeper into underlying tissue.

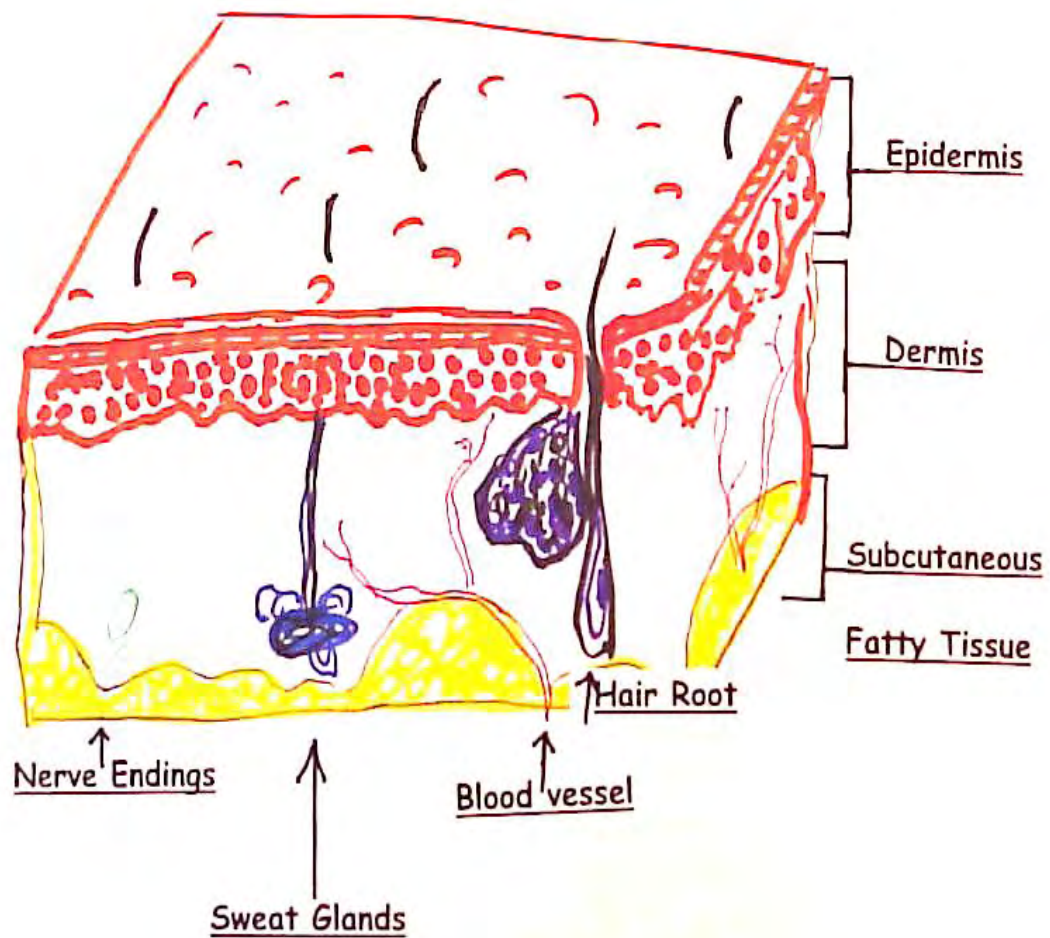
Objective 7: Define and arrange in the order of occurrence the four stages of tissue breakdown involved in *pressure ulcer* development.

<u>Content</u>	<u>Notes</u>
<p><b><u>Key Words and Definitions</u></b></p> <p><u>Epidermis</u>-Outermost layer of skin tissue. It gives skin its color and protects the underlying skin tissue from the sun. Cells in the epidermis slough off and are replaced by new cells daily.</p> <p><u>Dermis</u>-Second layer of skin tissue, covered by epidermis. Contains blood vessels, nerve endings, sweat glands, and hair roots, etc.</p> <p><u>Subcutaneous</u>-Thick, inner layer of skin that attaches the dermis to underlying structures. Contains fatty tissue that cushions and protects deeper tissues.</p>	

Objective 7: Define and arrange in the order of occurrence the four stages of tissue breakdown involved in *pressure ulcer* development.

<u>Content (cont'd)</u>	<u>Notes</u>
<p>Normal skin is usually said to have three layers.</p> <p><i>(Instructor: Please use Overhead 13)</i></p> <p>The first, outermost, layer is the epidermis. The epidermis gives skin its color and protects the underlying skin tissue from the sun. Cells in the epidermis slough off and are replaced by new cells daily.</p> <p>The second layer of normal skin is called the dermis. It is covered by the epidermis and contains blood vessels, nerve endings, sweat glands, and hair roots, etc.</p> <p>The third layer is called the subcutaneous. This is a thick, inner layer of skin that attaches the dermis to underlying structures. The subcutaneous contains fatty tissue that cushions and protects deeper tissues.</p> <p>In normal skin, tissue breakdown or an ulcer can develop.</p>	

## Normal Skin Anatomy



Objective 7: Define and arrange in the order of occurrence the four stages of tissue breakdown involved in *pressure ulcer* development.

Content (cont'd)

Notes

*(Instructor: Please use Transparencies 14-14a - d)*

There are four stages of tissue breakdown involved in *pressure ulcer* development.

Each stage represents deeper damage to the skin layers and underlying structures.

**Stage 1**-Redness, darkened or non blanching skin. Color not restored to normal within 30 minutes after pressure relieved.

**Stage 2**-Blister-like areas in the epidermis. The epidermis may be broken and the dermis may be exposed.

**Stage 3**-Epidermis is destroyed. Dermis may also be destroyed exposing the subcutaneous, fatty layers below. Infection may be developing.

**Stage 4**-Skin and fatty tissues are definitely involved. Muscle and bones may be involved and be visible, too.

*(Instructor: Please show Transparency 15 and distribute Activity Worksheet 4. Exercise may be done in small groups, using Transparency 15. Discuss in next class).*

Clinical Proficiency Module  
Pressure Ulcers

## The Four Stages of Pressure Ulcer Development

**Stage 1**-Redness, darkened or non blanching skin. Color not restored to normal within 30 minutes after pressure relieved.

**Stage 2**-Blister-like areas in the epidermis. The epidermis may be broken and the dermis may be exposed.

**Stage 3**-Epidermis is destroyed. Dermis may also be destroyed exposing the subcutaneous, fatty layers below. Infection may be developing.

**Stage 4**-Skin and fatty tissues are definitely involved. Muscle and bones may be involved and be visible, too

Clinical Proficiency Module  
Pressure Ulcers

## The Four Stages of Pressure Ulcer Development

# STAGE I



**Stage 1**-Redness, darkened or non blanching skin. Color not restored to normal within 30 minutes after pressure relieved.

Overhead 14a, Objective 7

## The Four Stages of Pressure Ulcer Development

# BEGINNING STAGE II



**Stage 2**-Blister-like areas in the epidermis. The epidermis may be broken and the dermis may be exposed.

Overhead 14b, Objective 7

## The Four Stages of Pressure Ulcer Development

# STAGE III



**Stage 3**-Epidermis is destroyed. Dermis may also be destroyed exposing the subcutaneous, fatty layers below. Infection may be developing.

## The Four Stages of Pressure Ulcer Development

# STAGE IV



**Stage 4**-Skin and fatty tissues are definitely involved. Muscle and bones may be involved and be visible, too

Clinical Proficiency  
**Pressure Ulcers**  
Activity Worksheet

Can you label these pictures with the correct Stage of *pressure ulcer* development? Then, can you place the picture numbers in the order of their occurrence? Hint: One picture is of normal skin. Put that picture first!



1



2



3



4



5

Number the Pictures In The Order Of Occurrence

\_\_\_\_\_

Clinical Proficiency  
Pressure Ulcers  
Suggested Approach on Course Day 5

**Approximate Time To Review Activity Worksheet:** 15 minutes

*(Instructor, please use Overhead 15 or draw on a chalkboard or dry-erase board. Ask the students, as a group, to verbally help you complete the correct order of occurrence numbers at the bottom of the overhead.)*

Clinical Proficiency  
**Pressure Ulcers**  
Activity Worksheet 4

Can you label these pictures with the correct Stage of *pressure ulcer* development? Then, can you place the picture numbers in the order of their occurrence? Hint: One picture is of normal skin. Put that picture first!



Number the Pictures In The Order Of Occurrence

\_\_\_\_\_

**Approximate Time To Cover Content: 30 minutes**

Objective 8: Outline methods the aide may use to help prevent <i>pressure ulcers</i> .	
<u>Content</u>	<u>Notes</u>
<p><b><u>Key Words and Definitions</u></b></p> <p><u>Shearing</u>-Occurs when one layer of skin tissue is pulled in one direction while another layer is pulled in the opposite direction. This kinks or stretches the blood vessels interfering with circulation of blood.</p> <p><u>Observe</u>-To inspect carefully, to pay special attention.</p> <p><u>Prevention Actions</u>-Work activities that help to keep <i>pressure ulcers</i> from developing.</p> <p style="text-align: center;"><u>Lecture Content</u></p> <p>As an aide, your daily work places you in an important position to help prevent <i>pressure ulcers</i> in your patients or residents.</p> <p>This is true because you are giving personal care and can <b><u>observe</u></b> your patient or resident all over.</p> <p>When <b><u>observing</u></b>, you should look for those four beginning signs of a <i>pressure ulcer</i>.</p>	

**Objective 8: Outline methods the aide may use to help prevent *pressure ulcers*.**

Content (cont'd)

Notes:

In review, who can tell me what those four signs are?

Redness

Cyanotic, dusky, blue-gray area

Blistering

Skin Breakdown

Now, where on the resident's/patient's body, in particular, will you look?

*(Instructor: You may wish to use Overhead 6 again here)*

In review, you will want to look very carefully at those three most common areas for *pressure ulcers*. Where were those?

1. Spine
2. Tail Bones on either side of the lower spine
3. Hip Joint Bones

Then, as you continue with the personal care, you will look at those five additional common areas for *pressure ulcers*.

Who can show the class those areas on themselves?

- Heels and ankles
- Shoulders
- Knees
- Ears and Head
- Elbows

Many times you are giving personal care to someone who is obese or has a flap of skin in certain areas.

Objective 8: Outline methods the aide may use to help prevent *pressure ulcers*.

Content (cont'd)

Notes

We learned that certain areas of these can develop *pressure ulcers*. Where are these areas located on the obese resident/patient?

1. Under breasts
2. Folds of the abdomen
3. Between the buttocks
4. Thighs

Besides **observing** the signs that a *pressure ulcer* might be beginning and **observing** the areas that are the most common for *pressure ulcers*, your workday gives you an opportunity to **observe** residents/patients who are at risk to develop *pressure ulcers*.

We discussed five main healthcare situations that would place a resident/patient at risk for *pressure ulcer* development.

*(Instructor: You may wish to use Overhead 9 again here.)*

Do we know what those five situations were?

1. Confined to a bed, chair, or wheelchair
2. Immobility, can't move yourself around
3. Poor or no bowel or bladder control
4. Poor diet
5. Lowered Mental Awareness

As you go about your work each day, you **observe** those patient/residents who have one or more of these five situations and be sure that *pressure ulcer* **prevention actions** are taking place.

Objective 8: Outline methods the aide may use to help prevent *pressure ulcers*

<u>Content (cont'd)</u>	<u>Notes</u>
<p><b><u>Prevention actions</u></b> that can be used everyday by care team members are:</p> <ul style="list-style-type: none"> <li>• Keep skin clean and dry. As an aide, you have a great deal of control over this prevention action.</li> </ul> <p>Cleanse urine and feces from skin as soon as possible.</p> <p>It is very important that skin be left dry after it has been cleaned.</p> <p>Pat skin dry and avoid scrubbing skin. Scrubbing the skin can cause <u>shearing</u> to take place.</p> <p>Bacteria have a harder time developing an infection in clean, dry areas that stay clean and dry.</p> <p><u>Shearing</u> happens when one layer of skin moves in one direction and another layer moves in the opposite direction.</p> <p><i>(Instructor: Please use Overhead 16)</i></p> <p>Because of friction that is created, blood vessels can be kinked and closed by scrubbing the skin, especially in areas of the body that are already at risk for <i>pressure ulcer</i> development.</p> <p>The risk of skin injury caused by shearing can be minimized by using a turning sheet when moving a resident/patient up in the bed.</p> <p>It is very important for the continued good health of your resident/patient, therefore, to have a helper when moving someone in bed!</p>	

# Shearing

Occurs when one layer of skin tissue is pulled in one direction while another layer is pulled in the opposite direction.

This causes friction and kinks or stretches the blood vessels, interfering with circulation of blood.

Objective 8: Outline methods the aide may use to help prevent <i>pressure ulcers</i>	
<u>Content (cont'd)</u>	<u>Notes</u>
<ul style="list-style-type: none"> <li>• Reposition resident/patient as often as instructed by your supervisor or facility policy</li> </ul> <p>This is usually every two hours. Sometimes residents/patients are repositioned more often than every two hours.</p> <p>Be sure to check with your supervisor to be sure of how often to reposition those residents/patients who have one of those five risk situations.</p> <ul style="list-style-type: none"> <li>• Keep bed linens dry and free of wrinkles and objects that could irritate the skin.</li> </ul> <p><i>(Instructor: Please solicit responses from the group regarding why wrinkles and objects, like false teeth or glasses might be a problem for pressure ulcer development.)</i></p> <p><b>Answer:</b> It causes an area of increased pressure when the resident/patient is lying on wrinkles or objects.</p> <ul style="list-style-type: none"> <li>• Another <b><u>prevention action</u></b> is to be sure that clothes and shoes that you put on the resident/patient fit properly.</li> </ul> <p>Friction from ill-fitting clothing and shoes can injure the skin.</p> <p>As an example, clothing that is too tight across the shoulders may break the frail skin of a resident/patient.</p> <p>Another example: Ill-fitting shoes can rub a blister on heels and toes.</p>	

Objective 8: Outline methods the aide may use to help prevent *pressure ulcers*

Content (cont'd)

Notes

- A most important **prevention action** will be to **observe** those residents/patients who are not eating and drinking those items offered to them and **encourage** continued eating and drinking.

Since the aide is the person who is often able to see the food intake of a resident/patient, he/she will be one of the first to notice if a change has taken place in the amount of food eaten.

The aide will also be the one to know when water pitchers are empty or if the water is too cold or hot to drink. The aide plays an important role in the continued good health of the resident/patient.

- Finally, the aide must **report** any changes to the nurse or aide supervisor:

Changes in skin condition, color, temperature

Changes in food and drink intake

Changes in activity that would increase *pressure ulcer*

Risk

Clinical Proficiency Module  
**Pressure Ulcers**  
Suggested Approach on Course Day 6

**Approximate Time To Cover Content:** 30 minutes

**Objective 9:** Identify and explain equipment and techniques the aide might use to help prevent *pressure ulcers*.

Notes

*(Instructor, please add to this list any special equipment or techniques used in your facility that may not be found here. It is recognized that this list may be only a point of departure for this particular class discussion. Additional information you may bring would be enriching for the students.)*

*(Also, in preparation for this class, you may wish to bring examples of any of the mentioned equipment that can be found in your facility.)*

Content

Aides have available to them a number of techniques that may help prevent *pressure ulcers*.

These techniques sometimes include equipment that is not used in other areas of their daily work.

Bed cradles are frames that, when placed in the bed over a particular body part, will keep the cover and cover weight, lifted off the resident/patient.

An example might be to place the bed cradle over the resident's/patient's feet and then cover the bed cradle and the resident/patient.

This technique of equipment use helps an area of injured skin to have protection and warmth without any pressure.

Objective 9: Identify and explain equipment and techniques the might use to help prevent *pressure ulcers*.

<u>Content (cont'd)</u>	<u>Notes</u>
<p>Pressure is damaging to skin.</p> <p><u>Pillows</u> are such a common part of everyday work, it is hard to imagine them as "equipment" and something that is involved in a "technique" for preventing <i>pressure ulcers</i>.</p> <p>BUT, frequent positioning changes, using good body alignment, are a very important technique to use to help prevent <i>pressure ulcers</i>.</p> <p>And, pillows are the equipment of choice when repositioning a resident/patient into good body alignment that minimizes pressure on area at risk.</p> <p><u>Heel and elbow protectors</u> give extra cushion to areas of the body that are particularly at risk, those areas that are thinly covered bone.</p> <p>These pieces of equipment also help to protect against shearing when a resident/patient is being repositioned. They also help reduce friction when the resident/patient is moving about in the bed on his/her own.</p> <p><u>Turning sheets</u> give the aide the ability to move the resident/patient, <b>with help</b>, and minimize any friction or shearing that might happen if you tried to turn the resident/patient by yourself.</p> <p><u>Other</u> equipment you that may be seen are flotation pads or cushions, water beds, and alternating pressure mattresses.</p>	

Objective 9: Identify and explain equipment and techniques the aide might use to help prevent *pressure ulcers*.

Content (cont'd)

Notes

*(Instructor: Please ask the group if they have worked with equipment other than those mentioned. Ask how it worked and what they thought of the use of that equipment.)*

### **Review**

*Instructor, please evaluate their learning in a review format.*

*(Please use Overhead 3. Have the students, as a group, tell you what to write on each blank line. Then, project Transparencies 5, 8 and 10 using the same approach of having the group verbally complete the items requested while you complete the projected blanks.*

### **Evaluation**

Before leaving today, please complete the Course Evaluation. Remember, no name is requested or required. These are very helpful for future planning.

## Bibilography

Grubbs, P. (1999) *Essentials for Today's Nursing Assistant*. Upper Saddle River, NJ. Prentice-Hall, Inc.

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Suddarth, D. S. (1996) *The Lippincott Manual of Nursing Practice*. Philadelphia, PA, et al. J. B. Lippincott Company.

(1997, 2007) *Model Curriculum, Nurse I Training Program*. Raleigh, NC. North Carolina Department of Health and Human Services, Division of Health Service Regulation, Health Care Personnel Registry Section.

# **Curriculum Proficiency Module Evaluation**

## Pressure Ulcer Clinical Proficiency Module Instructor Evaluation

**Instructions:** Please take a few minutes to complete the following evaluation. Read each statement and circle the response that represents your opinion about the curriculum module. Your responses and comments will help us improve the contents of the Clinical Proficiency module, *Pressure Ulcers*. Thank you for your time.

Statements	Rating Scale				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Does not Apply
1.The objectives were appropriate for the content.	1	2	3	4	0
2.The content was appropriate for the nurse aide's level of learning.	1	2	3	4	0
3.The Activity Worksheets were appropriate and complemented the teaching/learning process.	1	2	3	4	0
4.The role-play activities were appropriate and complemented the teaching/learning process.	1	2	3	4	0
5.The handouts were appropriate and complemented the teaching/learning process.	1	2	3	4	0
6.The overhead transparencies were used, were appropriate and complemented the teaching/learning process.	1	2	3	4	0
7.The Clinical Practice was appropriate and complemented the teaching/learning process.	1	2	3	4	0
8.The nurse aides will be able to use what they have learned in the work setting.	1	2	3	4	0
9.The nurse aides will be able to use what they have learned away from the work setting.	1	2	3	4	0

Please write additional comments in the space below:

What are the learning needs of the nurse aides employed at your facility?

## Pressure Ulcer Clinical Proficiency Module Nurse Aide Evaluation

**Instructions:** Please take a few minutes to complete the following evaluation. Read each statement and circle the response that represents your opinion about the curriculum module. Your responses and comments will help us improve the contents of the Clinical Proficiency module, *Pressure Ulcers*. Thank you for your time.

Statements	Rating Scale				
	Strongly Agree	Agree	Disagree	Strongly Disagree	Does not Apply
1.The objectives were written clearly and helped me learn the content.	1	2	3	4	0
2.The content was appropriate for my level of learning.	1	2	3	4	0
3.The Activity Worksheets were helpful and helped me learn the content.	1	2	3	4	0
4.The role-play activities were helpful and helped me learn the content.	1	2	3	4	0
5.The handouts were helpful and helped me learn the content.	1	2	3	4	0
6.The overhead transparencies were helpful and helped me learn the content.	1	2	3	4	0
7.The clinical practice was helpful and helped me learn the content.					
8.I will be able to use what I learned in the work setting.	1	2	3	4	0
9.I will be able to use what I learned away from the work setting.	1	2	3	4	0

Please write additional comments in the space below:

What are additional learning needs do you have?